

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-27 (canceled).

Claim 28 (currently amended): A control method for a drive system utilizing a first motor with a first motor current, a first motor speed, and a first motor speed control signal and a second motor with a second motor current, a second motor speed, and a second motor speed control signal, wherein the control method is used to electrically simulate the characteristics of a mechanical differential, comprising:

detecting a drop in motor current associated with a loss of traction;

matching the first motor current into the first motor with a second motor current into the second motor;

repeating the matching until the first current and the second current are substantially equal;[.]

aligning the average speed of the first motor and the second motor with a speed set-point;

repeating the aligning until the average of the two motor speeds are substantially equal to the speed set-point;

measuring the current into the fastest motor;[.]

measuring the current into the slowest motor;

comparing the currents of the fastest motor and the slowest motor;

returning to the matching step if the fastest motor current is lower than the slowest motor current; and

adjusting the motor speed, incrementing the current to the slowest motor, and returning to aligning only if the fastest motor current is higher than the slowest motor current.

Claim 29 (currently amended): The control method of claim 28, wherein matching includes:

measuring the first current into the first motor;
measuring the second current into the second motor;
comparing the first current and the second current and marking one of the motor currents as a higher current motor and the other motor current as a lower current motor;
decrementing the current of the higher current signal when the currents are not equal; and
incrementing the speed of the lower current motor and equally decrementing the speed of the higher current motor.[:]

Claim 30 (currently amended): The control method of claim 28, wherein aligning includes:

measuring the speed of the first motor;
measuring the speed of the second motor;
averaging the speeds of the two motors to create an average speed;
comparing the average speed to the speed-set point; and
matching the currents if the average speed is not equal to the speed set-point.

Claim 31 (currently amended): A control method for a positive traction drive system utilizing a first motor with a first motor speed, and a second motor with a second motor speed, comprising:

measuring the speed of the first motor and the second motor;[,] and

equalizing the speed of the two motors regardless of the loss of traction by either wheel.

Claim 32 (currently amended): The control method of claim 31, further comprising:

detecting speeds greater than a given set-point; and

disabling the control method when the speeds are greater than the set-point.

Claim 33 (currently amended): A control method for a positive traction drive system utilizing a first motor with a first motor speed, and a second motor with a second motor speed, comprising:

measuring the speed of the first motor and the second motor within an allowable difference;[,] and

equalizing the speed of the two motors to be within the allowable difference.

Claim 34 (original): The control method of claim 33, further comprising:

varying the allowable difference as the speed is changed.

Claim 35 (currently amended): A vehicle ~~mower~~ comprising:

a first wheel;

a first motor drivingly connected to the first wheel;

a generator adapted to convert mechanical energy into electrical energy, the generator electrically connected to supply electrical power to the first motor; and

a fuel engine operatively connected to the generator adapted to provide mechanical energy to the generator.

Claim 36 (currently amended): The vehicle ~~mower~~ of claim 35, further comprising:

a power inverter electrically connected to the generator, the power inverter adapted to convert electrical energy from the generator into standard household electrical power.

Claim 37 (currently amended): The vehicle ~~mower~~ of claim 35, wherein the vehicle ~~mower~~ is a lawn tractor.

Claim 38 (currently amended): The vehicle ~~mower~~ of claim 35, further comprising:

a second wheel rotationally attached to the frame;

a second motor drivingly connected to the second wheel; and

the generator electrically connected to supply electrical power to the second motor.